

REMARKS

Claims 1-16, 18 and 19 are pending. Claims 1, 2 and 5-17 are rejected and claims 3, 4, 18 and 19 are withdrawn from consideration.

Applicants submit that no new matter has been added by way of the present amendment. For instance, claim 1 has been amended to recite a "wild-type full length" HGF and further amended to clarify the language concerning "fracture" as supported by the present specification at page 2, lines 18-19, page 3, lines 18-20, page 8, lines 2-21, and page 9, line 9. A similar amendment has been made to claim 7. Claim 1 has also been amended to delete "bone transplantation" and claim 17 has consequently been cancelled. The specification has been amended to insert suitable "SEQ ID NO" to comply with Sequence Listing requirements. Also, formal drawings have been submitted. Accordingly, no new matter has been added.

In view of the following remarks, Applicants request that the Examiner withdraw all rejections and allow the currently pending claims.

Sequence Listing

At pages 2-4 of the outstanding Office Action, the Examiner has objected to the specification for failure to comply with Sequence Listing Requirements. Applicants traverse.

In compliance with 37 C.F.R. §§ 1.821-1.825 Applicants have attached hereto a Sequence Listing. This Sequence Listing includes two SEQ ID NOs, which sequences correspond to the sequences listed at page 16, lines 5-6 of the present specification. The specification has also been amended to include the necessary SEQ ID NOs. A computer readable disk is also included which contains the same subject matter as the paper copy of the Sequence Listing, except that it is in computer form and lacks formatting. Thus, no new matter has been added. Accordingly, this objection is moot. Reconsideration and withdrawal thereof are requested.

Objection to the Drawings

At page 3 of the outstanding Office Action, the Examiner has objected to the drawings (1-4 and 8) since the allegedly are of such poor quality that they are uninterpretable. Applicants traverse and submit that replacement drawings have been submitted herewith. These replacement drawings are of formal quality. Accordingly, this objection is moot. Reconsideration and withdrawal thereof are requested.

Issues under 35 U.S.C. § 112, first paragraph

The Examiner has rejected claims 1-2 and 5-17 under 35 U.S.C. § 112, first paragraph for the reasons recited at pages 3-4 of th

outstanding Office Action. Applicants respectfully traverse this rejection.

The Examiner asserts that the specification does not reasonably provide enablement for stimulating the proliferation of chondrocytes or the synthesis of proteoglycans in chondrocytes *in vivo* or the treatment therefore of cartilaginous diseases or disorders in a mammal by the administration of HGF. Applicants respectfully disagree with the Examiner.

HGF is effective in the treatment of cartilaginous diseases or disorders in a mammal. In fact, as reported in *Acta Orthopaedica Scandinavica*, 68(5), p474-480 (1997), HGF is effective for *in vivo* articular cartilage repair (please refer to the Abstract). The Examiner's attention is further directed to pages 9-11 for dosage and administration guidance, as well as Examples 1 and 2 showing the efficacy of the presently claimed subject matter in a developing mouse limb bud and the thorax of a developing mouse.

Accordingly, Applicants submit that the present disclosure is fully enabling for the claimed subject matter. That is, one of ordinary skill in the art is able to make and use the invention based upon the present disclosure. Reconsideration and withdrawal of this rejection are respectfully requested.

Issues under 35 U.S.C. § 112, second paragraph

The Examiner has rejected claims 1-2 and 5-17 under 35 U.S.C. § 112, second paragraph for the recitation of "fracture" and "bone transplantation" in claim 1. Applicants traverse this rejection.

Claim 1 has been amended to remove the recitation of "bone transplantation" and the recitation of "fracture" has been clarified as "failure in restoration and cure of fracture." Accordingly, this rejection is moot. Reconsideration and withdrawal thereof are requested.

Issues under 35 U.S.C. § 103(a)

The Examiner has rejected claims 1-2 and 5-17 under 35 U.S.C. § 103(a) as being obvious over McCully, USP 5,565,558 (hereinafter referred to as McCully '558). Applicants traverse this rejection.

McCully '558 issued on October 15, 1996 and has an effective U.S. filing date of December 30, 1994. However, the present application was filed as a Continuation of U.S. Serial No. 08/793,121, filed April 21, 1997, which was the National Phase of PCT/JP95/00121 filed January 30, 1995, which claimed priority to Japanese Priority application JP 6-218164, filed August 19, 1994.

Attached hereto is a verified English translation of JP 6-218164 (JP 218164/1994). The present claims are supported by the Japanese priority application, accordingly, McCully '558 is removed as a prior art reference since the December 30, 1994 filing date of

McCully '558 is after the August 19, 1994 priority date of the present application. Reconsideration and withdrawal of this rejection are requested.

In view of the above, Applicants submit that the present claims are in condition for allowance. The Examiner is requested to withdraw all rejections and allow the currently pending claims.

If the Examiner has any questions or comments, please contact the undersigned at the offices of Birch, Stewart, Kolasch & Birch, LLP.

Pursuant to the provisions of 37 C.F.R. §§ 1.17 and 1.136(a), the Applicants hereby petition for an extension of three (3) months to December 18, 2003 in which to file a reply to the Office Action. The required fee of \$950.00 is enclosed herewith.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees


required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17;
particularly, extension of time fees.

Respectfully submitted,

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Enclosures: (1) Verified English translation of JP 6-218164
(2) Sequence Listing (paper copy and disk copy)
(3) Article by Shigeyuki Wakitani et al.,
"Hepatocyte growth factor facilitates cartilage
repair"
(4) Eight (8) sheets of formal drawings